Listing of Claims:

Claims 1-7 (canceled)

8. (withdrawn) A DNA fragment having an initiation codon, a stop codon and a coding sequence between said two codons, said coding sequence substantially corresponding to said amino acid sequence of claim 1.

9. (withdrawn) The DNA fragment of claim 8, wherein said DNA fragment has a sequence of nucleotide residues substantially identical to SEQ ID NO: 4 in FIG 2.

10. (withdrawn) The DNA fragment of claim 8, wherein said DNA fragment has a sequence of nucleotide residues substantially identical to SEQ ID NO: 5 in FIG 3.

11. (withdrawn) A method of producing said truncated glucanase of claim 1, comprising:

(a) growing in a culture medium a bacterial strain containing a gene encoding for a wild-type 1,3-1,4-β-D-glucanase from *Fibrobacter succinogenes*,

(b) centrifuging said culture medium to produce a supernatant,

(c) incubating said supernatant to produce said truncated glucanase, and

(d) collecting and purifying said truncated glucanase from said supernatant.

12. (withdrawn) The method of claim 11, wherein said supernatant in step (d) is incubated for at least 7 days at 4 °C or a higher temperature.

13. (withdrawn) The method of claim 11, wherein said supernatant in step (d) is incubated for a period ranging from 10 days to 14 days and at a temperature ranging from 4 °C to 37° C.

14. (withdrawn) The method of claim 11, wherein said supernatant in step (d) is incubated for 14 days at 37 °C.

15. (withdrawn) A method of producing said truncated glucanase of claim 1, comprising:

(a) amplifying a DNA fragment using a PCR method from a DNA template containing a gene encoding for a wild-type glucanase from *Fibrobacter sucinogenes*, said DNA fragment substantially corresponding to a portion of said gene,

(b) subcloning said amplified DNA fragment in an expression vector,

(c) transferring said expression vector harbouring said DNA fragment into a host strain,

(d) growing said host strain in a culture medium for a period of time and inducing expression of said DNA fragment, with or without adding an inducer, to produce a sufficient amount of protein products, and

(e) collecting and purifying protein expression products from said culture medium.

16. (withdrawn) The method of claim 15, wherein said DNA fragment amplified in step (a) has a sequence substantially identical to SEQ ID NO: 6 in FIG. 6.

17. (withdrawn) The method of claim 11, wherein said gene encoding for a wild-type 1,3-1,4-β-D-glucanase is carried in a plasmid.

18. (withdrawn) The method of claim 17, further comprising, between step(a) and step(b), an additional step of adding to said culture medium an inducer to induce expression of said gene.

19. (withdrawn) The method of claim 15, wherein said host strain is a bacterial strain.

20. (Currently Amended) An isolated truncated glucanase having enhanced glucanase activity and thermal tolerance relative to a ~~matured~~ wild type glucanase (SEQ ID NO 3) wherein ~~absent~~ the signal peptide is absent in said isolated truncated glucanase that contains ~~and~~ an amino

acid sequence of a total number of amino acid residues between 248 and 267, said amino acid sequence comprises ~~comprising~~ SEQ ID NO: 1 or SEQ ID NO: 1 with ~~and~~ an extension from its ~~the~~ C-terminal ~~of SEQ ID: 1~~ of up to 19 amino acid residues, said isolated truncated glucanase has a specific activity of 7499 to 8321 U/mg, and said isolated truncated glucanase recovers at least 50% to 70% of its original glucanase activity after heat denaturation at about 100^0C for about 10 to 30 minutes, and incubation at 25^0C for 10 to 20 minutes.

21. (Currently amended) The isolated truncated glucanase of claim 20, absent a ~~repeated~~ ~~PXSSSS~~ SEQ ID No: 11 segment.~~, where X represents an uncharged amino acid residue~~.

Claims 22-24 (cancelled)

25. (New) An isolated truncated glucanase of claim 20 having an amino acid sequence identical to SEQ ID No: 1.

26. (New) An isolated truncated glucanase of claim 20 having an amino acid sequence identical to SEQ ID No: 2.